

# Comparisons of Job Characteristics

**Focus Occupation: Construction and Building Inspectors (47-4011)**

**Associated Occupation: Materials Engineers (17-2131)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

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<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 50

**Focus Occupation: Construction and Building Inspectors (47-4011)**

**Associated Occupation: Materials Engineers (17-2131)**

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	18.9	15.3	<<	Extensive education and/or training may be required
Chemistry	4.8	15.3	7.7	<<	Extensive education and/or training may be required
Physics	4.3	10.6	10.1	0	Current knowledge level may be sufficient
Design	5.2	7.9	14.0	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 79

**Focus Occupation: Construction and Building Inspectors (47-4011)**

**Associated Occupation: Materials Engineers (17-2131)**

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Science	4.5	13.0	6.4	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	12.0	10.7	<	A higher skill level may be required
Operations Analysis	5.0	11.7	5.1	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 95

**Focus Occupation: Construction and Building Inspectors (47-4011)**  
**Associated Occupation: Materials Engineers (17-2131)**

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Oral Expression	12.4	15.3	13.6	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	14.7	11.9	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.2	11.2	<<	Extensive improvement in abilities may be required
Written Comprehension	11.0	14.2	12.5	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.9	11.1	<	Some improvement in abilities may be required
Written Expression	9.8	13.8	11.2	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.5	9.4	<	Some improvement in abilities may be required
Originality	7.6	10.6	7.5	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	10.2	7.9	<	Some improvement in abilities may be required
Number Facility	6.3	9.2	7.3	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation: 48**

**Focus Occupation: Construction and Building Inspectors (47-4011)**  
**Associated Occupation: Materials Engineers (17-2131)**

Work Activities	Exclusivity of Activity
Analyze technical data, designs, or preliminary specifications	47
Confer with engineering, technical or manufacturing personnel	25
Direct and coordinate activities of workers or staff	3
Prepare reports	8
Prepare technical reports or related documentation	22
Read blueprints	10
Use knowledge of investigation techniques	16

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 70

**Focus Occupation: Construction and Building Inspectors (47-4011)**  
**Associated Occupation: Materials Engineers (17-2131)**

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Chemical evaluation instruments and supplies	10
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrical measuring and testing equipment	7
Electrochemical measuring instruments and accessories	9
Fluid mechanics equipment	11
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Length and thickness and distance measuring instruments	2
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Metals and metallurgy and structural materials testing instruments	15
Network applications software	1
Power tools	2
Pressure measuring and control instruments	10
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.